

## Claims

- [c1] 1. A network interface system, capable of supporting a plurality of physical layers, comprising:
- a network interface adapter supporting the plurality of physical layers, for connecting to a computer network, and further comprising:
    - a physical layer chip, capable of supporting the plurality of physical layers;
    - a device code storage device, for storing a device code of the network interface adapter supporting the plurality of physical layers;
    - a magnetic inductor, for coupling the physical layer chip, and interfacing between the physical layer chip and the computer network;
    - a first type connector, coupling the magnetic inductor with the computer network through one of the network physical layers; and
    - a second type connector, for coupling the magnetic inductor with the computer network through one of the network physical layers; and
  - a computer system, for inserting the network interface adapter supporting the plurality of physical layers, and further comprising:
    - a basic input/output, for providing a selection screen of the network physical layers and reading the device code, so as to calculate a simulation device code corresponding to a selected network physical layer according to the selected network physical layer and the device code;
    - a chipset, coupled to the basic input/output system, and embedded a network media access controller to provide an interface for the network interface adapter supporting the plurality of physical layers; and
    - a central processing unit (CPU), coupled to the chipset to execute an operating system of the computer system, the basic input/output system, and set up a device driver of the computer system according to the simulation device code.
- [c2] 2. The network interface system of claim 1, wherein the physical layer chip supports at least any two of the network physical layers of Ethernet, HomeNet, Wireless LAN and Home Plug.
- [c3] 3. The network interface system of claim 2, wherein the computer system at least has installed any two of the device drivers of the network physical layers of Ethernet, HomeNet, Wireless LAN and Home Plug.

[c4] 4. The network interface system of claim 1, wherein the interface complies with the advanced communication riser interface standard defined by US AMD Corporation.

[c5] 5. The network interface system of claim 4, wherein the operating system is a Windows operating system. 6. The network interface system of claim 5, wherein the device code comprises a SubSystem ID and a SubVendor ID of the PCI configuration.

[c6] 6. The network interface system of claim 1, wherein the basic input/output system program provides a manual option and an automatic option, wherein when the automatic mode is selected by the user, the computer system automatically detects the network physical layer that is physically connected, and calculates the simulation device code for the computer system to recognize the connected network physical layer according to the detected result.

[c7] 7. A network interface system supporting a plurality of physical layers, suitable for a computer network, comprising:  
a network interface adapter supporting the plurality of physical layers, for coupling the computer network, wherein the network interface adapter supporting the plurality of physical layers has the plurality of physical layers and a device code, and is able to connect the computer network through one of the network physical layers; and  
a computer system, wherein, the computer system is used to insert the network interface adapter supporting the plurality of physical layers, and drives the network interface adapter supporting the plurality of physical layers according to one of the network physical layers selected by a user, wherein, after the user installs the device drivers supporting the network physical layers, if the selected the network physical layer is to be changed, another physical layer is selected from a screen provided by the basic input/output system of the computer system; and then, the basic input/output system reads the device code provided by the network interface adapter supporting the plurality of physical layers to calculate a simulation device code corresponding to the selected network physical layer according to the network physical layer selected and the device

code read, so that the device driver is enabled.

- [c8] 8. A method supporting a plurality of physical layers, suitable for a computer system with a network interface adapter supporting the plurality of physical layers, wherein, the network interface adapter supporting the plurality of physical layers has the plurality of physical layers and a device code, the computer system has a basic input/output system, and has installed a plurality of device drivers supporting the network physical layers, wherein the method comprises the steps of:
- providing a selection setup screen of the basic input/output system to select one of the network physical layers, which is physically used;
- reading the device code provided by the network interface adapter supporting the plurality of physical layers; and
- according to the selected network physical layer and the read device code, calculating a simulation device code corresponding to the selected network physical layer to enable one of the device drivers.
- [c9] 9. The method of claim 9, wherein the network interface adapter supporting the plurality of physical layers at least supports any two of the network physical layers of Ethernet, HomeNet, Wireless LAN and Home Plug.
- [c10] 10. The method of claim 10, wherein the computer system at least has installed any two of the device drivers of the network physical layers of Ethernet, HomeNet, Wireless LAN and Home Plug.
- [c11] 11. The method of claim 9, wherein the basic input/output system program provides a manual option and an automatic option, wherein when the automatic mode is selected by the user, the computer system automatically detects the network physical layer that is physically connected, and calculates the simulation device code for the computer system to recognize the physically connected physical layer according to the detected result.